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Parking to Place: Barriers and Opportunities for Adaptability in New Parking Structure Construction in Los Angeles

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# Parking to Place: Barriers and Opportunities for Adaptability in New Parking Structure Construction in Los Angeles

Anthony Fonseca, MURP (2019)

## Issue

In the urban landscape, parking structures have evolved to become lean, level-of-service driven objects that occupy valuable space. Recent urban trends have caused planners to rethink the definition of parking structures and their contribution to the functions of the city. In light of the new narrative on the urban parking structure, how can the City of Los Angeles better support efforts to construct parking garages in a manner that enables them to be repurposed for some use other than parking in the future?

This study looks into a future where demand for parking could be drastically different due to possible outcomes with shared autonomous vehicles. In that future, the physical space dedicated to parking could potentially sit unused if cities are unprepared to adapt and create something new from the many parking structures that are built. The purpose of this report is to evaluate what barriers and obstacles exist for the development of adaptable parking and how the City of Los Angeles can further encourage such efforts.

## Research Findings

- Apartments or office space converted from parking structures require the necessary mechanical, electric, and plumbing systems, circulation, light and air, and structural standards that are shared by conventional construction. There are new examples of adaptable parking structures using innovative techniques with outcomes that require less intense interventions.
- Development timelines and business models dictate a developer's sensitivity to parking demand decreases, and by association their propensity to build parking adaptably.
- Short-term tenant preferences and tenant turnover reduces incentive to produce adaptable parking.
- Emphasizing efficiency and form together can help meet both immediate and long-term needs. The challenge for developers is to continue to provide the parking ratios consistent with current perceived demand and ensure that their parking will be adaptable, all while minimizing cost.
- Supply constrained markets give adaptability merit. Market supply and the depth of the tenant market are the foundation of the decision-making process when it comes to building adaptable parking.

## KEY TAKEAWAYS

- It is possible to build parking structures that are adaptable to new transportation demands without compromising project feasibility.
- Strategies that encourage adaptability for a parking structure can exist on a spectrum that demands varying amounts of resources.
- Efforts to reduce the use of conventional single-occupancy vehicles with a network of shared self-driving vehicles is central to private sector motivation to build adaptable parking structures.

## Approach

In order to analyze the current conditions and provide recommendations, the researcher conducted 11 structured interviews. The interviews were conducted to help deepen the understanding of the issue, inform future research, and clarify which specific obstacles or opportunities there are for the City of Los Angeles.

## Conclusions

- The concept of adaptable parking structures is predicated on a future shift in demand from conventional single-occupancy vehicles, and uncertainties around the timing and implementation of fully autonomous vehicles. The LA Department of City Planning should continue its efforts to guide this transition and shift away from conventional single-occupancy vehicles. Concurrently, planners should expect that developer sensitivities and timelines will be reactionary with regard to shifts in parking demand. Policies promoting the development of adaptable parking structures should proceed regardless of the current perceptions of developers.
- Potential future pilot studies for adaptable parking policies should look into factors such as low vacancy, high land cost, and high tenant demand as indicators of area suitable for special adaptable districts or zones.
- Development standards for parking structures should originate from the perspective of human oriented design. There are several things that the LA Department of

City Planning could require to promote adaptability, such as structural capacity and floor-ceiling heights that are adequate to sustain habitable uses.

- Some developers have progressed on maintaining parking capacity demanded today while simultaneously using higher ceiling heights and appropriate structural specifications. By regulating spatial efficiency of parking structures, the city can encourage developers to use stacker or elevator technologies. These interventions would ideally push the development of parking structures to focus both on being adaptable as well as mitigate permit projects to be flexible in transitioning to a time with potentially much lower demand for parking.

Figure: Developer thoughts on moving towards a future with adaptable parking structures

***“Zoning is slow to change and adapt to realities, but then you have this private sector element that’s entirely driven by subjectivity...”***

– Los Angeles developer

## For More Information

Fonseca, A. (2019). *Parking to place: Barriers and opportunities for adaptability in new parking structure construction in Los Angeles* (Masters capstone, UCLA). Retrieved from: <https://escholarship.org/uc/item/2zk8b1z7>

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